| Ind | ex of | Claims |  |
|-----|-------|--------|--|
|     |       |        |  |

| Application/Control No. | Applicant(s)/Patent under Reexamination |
|-------------------------|---|
| 10/721,721              | KAPPES ET AL.                           |
| Examiner                | Art Unit                                |

| √ | Rejected |
|---|----------|
| = | Allowed  |

| ı | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| + | Restricted                     |

| N | Non-Elected  |
|---|--------------|
|   | Interference |

Christopher D. Biagini

| A | Appeal   |
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| 0 | Objected |

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| Cla   | im                    | Date     |          |              |   |              |  |          |          |              |                 |
| Final | Original              | 9/11/12  | 11/7/107 |              |   |              |  |          |          |              |                 |
|       | 1                     | J        | 1        |              |   |              |  | Ι,       |          |              | П               |
|       | 2                     | 1        | 7        |              |   | _            |  |          | _        |              | П               |
|       | 3                     | Ħ        | ī        | $\vdash$     |   |              |  |          |          |              |                 |
|       | 4                     | 1        | 7        |              |   |              |  |          |          |              |                 |
|       | 1<br>2<br>3<br>4<br>5 | Π        |          |              |   |              | Г  | Г        |          |              | П               |
|       | 6                     | П        |          |              |   |              |  |          |          |              | П               |
|       | 7                     | П        |          | Г            |   |              |  |          |          |              |                 |
|       | 8                     | П        |          |              |   |              |  |          |          |              |                 |
|       | 9                     | П        |          |              |   |              |  |          |          |              |                 |
|       | 10                    | П        |          |              |   |              |  |          |          |              |                 |
|       | 11                    | Ц        |          |              |   |              |  |          |          |              |                 |
|       | 12                    | 1        |          |              |   |              |  | L        |          |              |                 |
|       | 12<br>13<br>14        | 7        | _        | ļ            |   | _            | <u> </u>   |          | _        |              |                 |
|       | 14                    | 1        | )        |              |   | <u> </u>     |  | L        | <u> </u> | L            |                 |
|       | 15<br>16              | Ц        |          | Щ            |   | <u> </u>     | <u> </u>   | <u> </u> |          |              | Ш               |
|       | 16                    | Ц        |          | Ĺ            | L | L_           | L_   | L        | L        | L            | Ш               |
|       | 17                    | Ц        |          | <u> </u>     |   |              | <u> </u>   |          |          |              |                 |
|       | 18<br>19              | Ц        |          | ļ            |   | _            | _  | _        | _        |              | _               |
|       | 19                    | Ц        |          | <u> </u>     |   |              | _  |          |          |              |                 |
|       | 20                    | Ц        | _        |              |   | <u> </u>     | <u> </u>   |          | <u> </u> | L            | Ш               |
|       | 21                    | Ц        |          | <u> </u>     | _ |              | <u> </u>   | ļ.,      | L_       | _            | Ш               |
|       | 22                    | Ц        | Į        | <u> </u>     |   | <u> </u>     | <u> </u>   |          | <u> </u> | _            | Ш               |
|       | 23                    | 2        | <u>,</u> | -            |   | <u> </u>     | <u> </u>   |          | _        | <u> </u>     | Н               |
|       | 24<br>25              | ├-       | _        | <u> </u>     | - | ⊢            | ┝  |          | <u> </u> | H            | Н               |
|       | 25                    | ├        | _        | <u> </u>     | - | -            |  | -        | _        | -            | $\vdash$        |
|       | 26<br>27<br>28        | ┝        | -        | <del> </del> | _ | $\vdash$     | ⊢  | $\vdash$ | <u> </u> | H            | Н               |
|       | 28                    | ┢        | _        | <del> </del> | _ | $\vdash$     | $\vdash$   | $\vdash$ |          | $\vdash$     | Н               |
|       | 29                    | H        | _        | -            |   | $\vdash$     | <del>                                     </del> |          | _        |              | Н               |
|       | 29<br>30              | H        | _        | H            |   |              | $\vdash$   | $\vdash$ |          |              | Н               |
|       | 31                    |          |          |              |   |              | $\vdash$   |          |          | _            | Н               |
|       | 32                    | 1        | _        | <b> </b>     |   | Г            |  | $\vdash$ |          |              | Н               |
|       | 33                    |          | 1        |              |   |              |  |          |          | Г            | П               |
| :     | 34                    |          |          |              |   |              |  |          |          |              |                 |
|       | 35                    |          |          |              |   |              |  |          |          |              |                 |
|       | 36                    | L        |          |              |   |              |  |          |          |              |                 |
|       | 37                    |          |          |              |   |              |  |          |          |              |                 |
|       | 38                    | L        |          |              |   |              |  | L_       |          | $oxed{oxed}$ |                 |
|       | 39                    | L        |          |              |   |              | L.   |          |          |              |                 |
|       | 40                    | -        | _        | _            | _ | _            | _  | _        |          |              | Ш               |
|       | 41                    | -        | 4        |              |   | _            | <u></u>  | _        |          |              | Н               |
|       | 42                    | $\vdash$ | -        | <u> </u>     |   |              | -  |          | <u> </u> | <u> </u>     | $\vdash \vdash$ |
|       | 43<br>44              | $\vdash$ | -        |              |   | _            | -  | -        |          | H            | $\vdash \vdash$ |
|       | 45                    | $\vdash$ | 4        | -            |   | -            | $\vdash$   | <u> </u> | H        | $\vdash$     | H               |
|       | 46                    | ├        | -        | $\vdash$     | - | -            | $\vdash$   | H        |          | $\vdash$     | $\vdash \vdash$ |
|       | 47                    | $\vdash$ | +        | -            | - | <del>-</del> | <del> </del>                                     | -        | Н        | Н            | Н               |
|       | 48                    | +        | 1        | $\vdash$     | H |              | $\vdash$   |          |          | -            | $\vdash \vdash$ |
|       | 49                    | +        | -        | $\vdash$     | - | <u> </u>     |  |          |          | $\vdash$     | $\vdash$        |
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| <u> </u>        | 51             | -        | $\vdash$ | ├  | $\vdash$                            | _            | ┝   | ┝            | ⊢          | Н                  |
| -               | 51             | -        | ┝        | -  | -                                   | _            | _   | -            | ┝          | Н                  |
| <u> </u>        | 52<br>53       |          | -        | <del> </del>                                     |                                     | -            | -   |              | -          | Н                  |
|                 | 53             |          | <u> </u> | ├  | _                                   | _            | ⊢   | <u> </u>     | ⊢          | Н                  |
|                 | 54             |          | <u> </u> | <u> </u>   | _                                   |              | <u> </u>  | <u> </u>     | <u> </u>   | Н                  |
| <u> </u>        | 55             |          |          |  | <u> </u>                            |              | _   | <u> </u>     | <u> </u>   | Щ                  |
|                 | 56             | _        | <u> </u> | <u> </u>   | _                                   |              | L.  | <u> </u>     | <u> </u>   | <u> </u>           |
|                 | 57             |          | _        | <u> </u>   | _                                   |              |   | <u> </u>     |            | Щ                  |
|                 | 58<br>59       |          | _        | _  | _                                   |              | _   | _            | _          | Ш                  |
|                 | 59             |          | <u> </u> | _  | _                                   |              | $ldsymbol{le}}}}}}$ |              | L          |                    |
|                 | 60             |          |          | lacksquare                                       |                                     |              |   |              | lacksquare |                    |
|                 | 61<br>62<br>63 |          |          | <u> </u>   | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ |              |   | <u> </u>     | _          |                    |
| <u> </u>        | 62             |          |          |  | _                                   |              |   | L            | _          |                    |
|                 | 63             |          | <u> </u> | L  | L                                   |              |   | <u> </u>     | <u> </u>   | Ш                  |
|                 | 64             |          |          |  |                                     |              |   | L            | _          | $oxedsymbol{oxed}$ |
|                 | 64<br>65       |          |          | L  |                                     |              | L   | L            | L          |                    |
|                 | 66             |          |          |  |                                     |              | $L^-$   |              |            |                    |
|                 | 67             |          |          |  |                                     |              |   |              |            |                    |
|                 | 68             |          |          |  |                                     |              |   |              |            |                    |
|                 | 69             |          |          | Г  |                                     |              |   |              |            |                    |
|                 | 70             |          |          |  |                                     |              |   |              |            |                    |
|                 | 69<br>70<br>71 |          |          |  |                                     |              |   | _            |            |                    |
|                 | 72             |          |          |  |                                     |              |   |              |            |                    |
|                 | 73             |          |          | $\vdash$   |                                     |              | Г   |              |            |                    |
|                 | 72<br>73<br>74 |          |          |  |                                     | -            |   |              |            |                    |
|                 | 75             |          |          | $\vdash$   |                                     |              | $\overline{}$   |              |            | $\Box$             |
|                 | 75<br>76<br>77 |          |          | $\vdash$   |                                     |              | _   | <b></b>      | _          |                    |
|                 | 77             | _        |          | $\vdash$   | $\vdash$                            |              | _   | $\vdash$     |            | Н                  |
| $\vdash$        | 78             |          |          | $\vdash$   | $\vdash$                            |              |   | _            | -          | Н                  |
| $\vdash$        | 78<br>79       |          | -        | $\vdash$   |                                     |              | _   | $\vdash$     | $\vdash$   | $\dashv$           |
|                 | 80             |          | $\vdash$ | $\vdash$   | $\vdash$                            | -            | -   |              |            | $\vdash$           |
| <b></b>         | 81             |          | _        | $\vdash$   |                                     |              | _   | $\vdash$     |            | H                  |
|                 | 82             | -        | -        | ┢  | -                                   |              |   |              |            | Н                  |
| _               | 83             | -        |          | ├  | -                                   |              |   | ┢            | -          | $\dashv$           |
| -               | 84             | -        | -        | <del>                                     </del> |                                     | _            |   | -            | $\vdash$   | $\dashv$           |
|                 | 85             | -        | -        | -  | -                                   | $\vdash$     | <del> </del>  | $\vdash$     | $\vdash$   | $\dashv$           |
| -               | 86             |          |          | $\vdash$   | -                                   | -            | $\vdash$  | $\vdash$     | -          | ${\mathbb H}$      |
|                 | 86<br>87       | -        |          |  | -                                   | -            |   | -            | $\vdash$   | $\vdash$           |
| <b></b>         | 88             | $\vdash$ | -        | <del>                                     </del> | $\vdash$                            | $\vdash$     | ┢━  | <del> </del> | $\vdash$   | $\dashv$           |
| $\vdash$        | 89             | -        | H        | $\vdash$   | $\vdash$                            | $\vdash$     |   | $\vdash$     |            | $\vdash\vdash$     |
| $\vdash$        | 90             |          | Η.       | $\vdash$   | $\vdash$                            |              | $\vdash$  | $\vdash$     | $\vdash$   | Н                  |
| $\vdash$        | 91             |          | -        | -  | <b>-</b>                            | <del> </del> |   | $\vdash$     | -          | $\vdash\vdash$     |
|                 | 92             | -        | -        | <del> </del>                                     | $\vdash$                            | $\vdash$     | <u> </u>  |              | -          |                    |
| <u> </u>        | 93             | $\vdash$ | -        | -  | $\vdash$                            | $\vdash$     | Η-  |              | -          | -                  |
| $\vdash \vdash$ |                | -        |          | -  | -                                   | —            |   |              | $\vdash$   | $\vdash$           |
|                 | 94<br>95       |          |          | <del> </del>                                     | -                                   | -            | ├   | $\vdash$     | $\vdash$   | Н                  |
| <u> </u>        |                | $\vdash$ | H        | $\vdash$   | $\vdash$                            | $\vdash$     | <u> </u>  | <u> </u>     | <u> </u>   | Н                  |
| $\vdash$        | 96             | $\vdash$ | $\vdash$ | ⊢  | <u> </u>                            | <u> </u>     | <u> </u>  | ļ            | <u> </u>   | $\vdash \vdash$    |
| $\vdash$        | 97             |          |          | <u> </u>   | $\vdash$                            | <u> </u>     | <u> </u>  | <u> </u>     | _          | Н                  |
| $\vdash \vdash$ | 98             |          | $\vdash$ | <u> </u>   | $\vdash$                            | $\vdash$     | $\vdash$  | <u> </u>     | <u> </u>   | Щ                  |
| $\vdash$        | 99             | $\vdash$ | $\vdash$ | <u> </u>   | -                                   | <b> </b>     | <u> </u>  | <u> </u>     | <u> </u>   | $\vdash$           |
| لــــا          | 100            | لـــا    | L        |  |                                     |              | Ш.  | L            |            | Ш                  |

| Cla             | Claim Date |          |              |                   |          |          |  |          |          |                 |
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|                 |            |          |              |                   |          |          |  |          |          |                 |
| Final           | Original   |          |              |                   |          |          |  |          |          |                 |
|                 | 101        |          |              |                   |          |          |  |          |          |                 |
|                 | 102        |          |              |                   |          |          |  |          |          |                 |
|                 | 103        |          |              |                   |          |          |  |          |          |                 |
|                 | 104        |          |              |                   |          |          |  |          |          |                 |
|                 | 105        |          |              |                   |          |          |  |          |          |                 |
|                 | 105<br>106 |          |              |                   |          |          |  |          |          |                 |
|                 | 107        | _        |              |                   |          | L        | L  |          | L        | Ш               |
|                 | 108        |          |              | L                 |          |          |  |          | L        |                 |
|                 | 109        |          | L            | _                 |          |          |  |          | _        | Ш               |
| <u> </u>        | 110        |          | L            |                   | ļ        |          |  |          |          | Ŀ               |
| ļ               | 111        |          | Ľ            | _                 | <u> </u> | _        | _  |          | <u> </u> | Ш               |
|                 | 112        |          | <u> </u>     |                   |          | <b> </b> | ⊢  |          | <u> </u> |                 |
| <u> </u>        | 113        | <u> </u> | <del> </del> | ├                 | <u> </u> | <u> </u> | -  | ⊢        | ├        | Н               |
| <u> </u>        | 114        | _        | $\vdash$     | ⊢                 | <u> </u> | <u> </u> | $\vdash$   | -        |          | $\vdash\vdash$  |
|                 | 115        | _        | ├            |                   |          |          |  | $\vdash$ | ┝        | $\vdash$        |
|                 | 116<br>117 |          |              |                   |          | -        | ├  | -        | -        | -               |
|                 | 118        |          | ⊢            | $\vdash$          | $\vdash$ |          |  | -        | ├        | $\vdash$        |
| <del></del>     | 119        |          | -            | _                 |          | ┢        | $\vdash$   | -        | -        | Н               |
|                 | 120        |          |              | $\vdash$          | $\vdash$ | $\vdash$ | -  | _        | _        |                 |
|                 | 120<br>121 | _        |              | $\vdash$          | $\vdash$ | $\vdash$ |  |          | $\vdash$ | Н               |
|                 | 122        |          |              | _                 | _        | _        |  |          |          |                 |
|                 | 122<br>123 |          |              |                   |          |          | Г  |          |          |                 |
|                 | 124        |          |              |                   |          |          |  |          |          |                 |
|                 | 125<br>126 |          |              |                   |          |          |  |          |          |                 |
| Ш               | 126        |          |              | $ldsymbol{f eta}$ |          | _        | _  |          |          | Ш               |
|                 | 127<br>128 | _        | _            | <u> </u>          | <u> </u> | <u> </u> | <u> </u>   | _        |          |                 |
| $\vdash$        | 128        |          |              | $\vdash$          | <u> </u> | <u> </u> | <u> </u>   | L        | _        | Ш               |
|                 | 129        | -        | -            | H                 | <u> </u> |          | <u> </u>   |          |          | Н               |
| $\vdash$        | 130<br>131 | _        | H            | ⊢                 | ┝        | ┝        | ⊢  | -        |          | Н               |
|                 | 132        | _        | -            | -                 |          | _        | _  |          |          | Н               |
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| $\vdash \vdash$ | 134        | _        | $\vdash$     | -                 |          | $\vdash$ | $\vdash$   | -        |          | $\vdash$        |
| $\vdash$        | 135        | _        |              |                   | _        | $\vdash$ | <del>                                     </del> |          | _        |                 |
|                 | 136        | _        |              |                   | $\vdash$ | $\vdash$ | $\vdash$   | $\vdash$ | Н        | H               |
|                 | 137        |          | П            |                   | Г        | Г        | Г  |          | _        | Н               |
|                 | 138        | _        |              |                   |          |          |  |          |          |                 |
|                 | 139        |          |              |                   |          |          |  |          |          |                 |
|                 | 140        |          |              | $\tilde{\Box}$    |          | Ĺ        |  |          |          |                 |
|                 | 141        |          | $\Box$       |                   |          | L        |  | L_       |          | Ш               |
|                 | 142        |          |              | L                 | _        | _        | L  | $\vdash$ |          | Ш               |
| <u> </u>        | 143        |          | $\vdash$     |                   | Ш        | $\vdash$ | _  | <u> </u> | _        | Н               |
|                 | 144        | <u> </u> | H            |                   | -        | <u> </u> | <u> </u>   | $\vdash$ | $\vdash$ | $\vdash \vdash$ |
|                 | 145        |          | $\vdash$     | -                 |          | _        | <u> </u>   | -        |          | $\vdash\vdash$  |
| $\vdash$        | 146<br>147 | _        |              |                   | Η.       | -        | ⊢  | H        | H        | $\vdash$        |
| $\vdash$        | 148        |          | -            |                   | H        | -        | $\vdash$   | $\vdash$ | -        | $\vdash\vdash$  |
|                 | 149        | -        | Н            | H                 | Н        | Н        | -  | Н        | H        | $\vdash$        |
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